# NOAA SHIP WHITING

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Welcome aboard.

This ship is our home, our work place, and our pride. We will gladly answer any questions concerning the ship and its activities.

We hope your visit will be both educational and enjoyable.

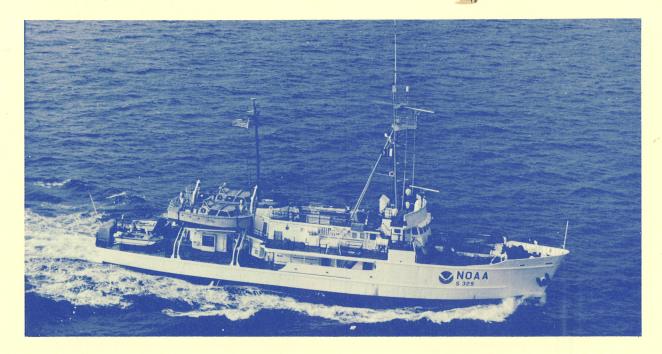
## Ship's Mission

NOAA Ship WHITING's primary mission is conducting hydrographic surveys in the coastal waters of the United States. These surveys are the source of depths and related information shown on NOAA's nautical charts. Hydrographic surveys also provide information for coastal planning and management, storm-surge predictions, and oceanographic research.

The officers and crew of WHITING measure sea floor depths with a continuous-profile echo sounder, and search for wrecks, rocks, and other dangers with a side scan sonar. Accurate positions for these depths and dangers are determined with specialized satellite-based navigation systems. Tide gauges operating in the survey area provide the data needed to adjust all measured depths to a common stage of tide.

Computerized data acquisition and processing systems help acquire, organize, display, and record our survey information. To supplement the work of the ship, two survey launches, carried aboard, are fully outfitted for hydrographic survey data acquisition.

WHITING is also equipped to conduct deep water bathymetric surveys. In these surveys the ocean bottom is mapped using a multibeam swath sonar. The ship can also serve as a research platform for deploying seabottom tide gauges, current meters, and other oceanographic instruments.



# **Henry Laurens Whiting**

The NOAA Ship WHITING is named for the 19th century engineer, Henry Laurens Whiting, who served in the U.S. Coast Survey, forerunner of NOAA, from 1838 to 1897. In addition to becoming one of the great experts in topography and coastal engineering, he served as an educator at the Massachussetts Institute of Technology and the U.S. Naval Academy. His 60-year tenure of service is unmatched in the history of NOAA.

### **Characteristics**

Builder Marietta Mfr. Company Pt. Pleasant, West Virginia

Commissioned July 8, 1963

Call Letters WTEW

Length 163 feet (49.7 meters)

Beam 33 feet (10.1 meters)

Draft 12.5 feet (3.8 meters)

Displacement 907 ton

Propulsion Twin Diesel,

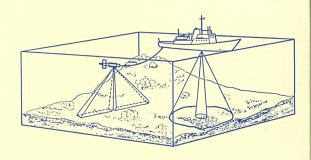
Controllable Pitch Propellers

Horsepower 1600

Speed 12 knots

Range 5,700 nautical miles

Complement 7 Officers, 27 Crew



#### Side Scan Sonar and Sunken Wrecks

WHITING supplements its depth-sounding surveys with a side scan sonar. A side scan sonar is mounted in a "towfish" pulled behind the ship. By reflecting sound off the the sea bed, this sonar obtains images of wrecks, obstructions and bottom features that may be hazardous to navigation. The sonar covers a swath 100 meters on each side of the ship. To obtain reliable sonar images, the ship must travel at slow speed, usually no faster than 5 knots. Swaths are completely overlapped to ensure that no dangers remain undetected.

When a sunken danger is discovered, the ship's SCUBA divers are sent to examine the wreck or obstruction in detail and measure its exact depth.



#### An Overview of NOAA

The National Oceanic and Atmospheric Administration (NOAA) was established in 1970 as part of the Department of Commerce. Although NOAA is a young agency, it is made up of some of the oldest elements in the government. Its origins can be traced to the Survey of the Coast organized in 1807, the U.S. Weather Bureau dating back to 1870, and the Office of the Commissioner of Fish and Fisheries formed in 1871.

Today, more than 12,000 people are employed by NOAA. Five major branches comprise the bulk of NOAA's activities: National Ocean Service, National Marine Fisheries Service, National Weather Service, National Environmental Satellite, Data, and Information Service, and Office of Oceanic and Atmospheric Research.

The WHITING and NOAA's other survey and research vessels are operated by the Office of NOAA Corps Operations. The NOAA Corps is the smallest of the Nation's seven uniformed services. Approximately 400 officer-scientists work aboard NOAA ships and aircraft, in laboratories, mobile field parties, and support offices around the world.

For more information about NOAA, write:

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